6.2.3.4 Special Status Species

No-action Alternative

Under the No-action Alternative at the Landover site, there would be no measurable impacts to special status species because there are no approved plans for future redevelopment that would impact habitat used by these species.

Landover Alternative

Under the Landover Alternative, there would be no measurable impacts to special status species at the Landover site, including federally and state-listed wildlife or state rare plant species, because federally and state-listed wildlife and state rare plant species are not present at the site (USFWS 2014b; Golden 2015).

Due to the presence of trees around the borders of the site, there is a slight likelihood that species of migratory birds of conservation concern may be present at the Landover site year-round or for breeding or wintering purposes. Displacement to year-round or wintering avian species would temporarily increase as a result of increased human activity and noise associated with construction on-site, resulting in direct, short-term. adverse impacts. These impacts to birds of conservation concern would be minimal because of the relatively small area being affected and because there are other areas adjacent to the site where displaced individuals could move. Over the long term, the increased lighting of the campus may interfere with migratory birds' instinctive behavior that assists them in migrating (Florida Atlantic University n.d.), however the use of full cut-offs would minimize the potential for this impact.

Transportation Mitigations

All transportation mitigation activities that require construction efforts would require minimal removal of existing habitat. Transportation mitigation that would involve construction of new lanes, including the approximately 400 linear feet of roadway construction required to connect the southern exit of the site to Brightseat Road, as shown in figure 6-40, could have long-term direct impacts to special status species because small strips of grasslands and forested habitat along existing thoroughfares would be replaced with roadway. There could also be direct, long-term, adverse impacts to special status species from the conversion of forest habitat to roadway for the approximately 400 linear feet of roadway construction required to connect the southern exit of the site to Brightseat Road. Given the relatively low quality of this habitat and its location in a suburban area, it is unlikely that special status species would be impacted. It is anticipated that the migratory birds that potentially use this habitat would either not be present at the areas designated for construction or would avoid the area because of noise and human interaction, which could result in direct, long-term, adverse impacts.

6.2.4 Land Use, Planning Studies, and Zoning

The following sections describe the environmental consequences for land use and zoning under both the No-action Alternative at Landover and the Landover Alternative.

LAND USE, PLANNING STUDIES, AND ZONING ASSESSMENT OF SIGNIFICANCE

Impacts to land use, planning studies, and zoning would not result in significant impacts, as defined in section 3.5.3.

6.2.4.1 No-action Alternative

Under the No-action Alternative at the Landover site, there would be no measurable impacts to land use or zoning because there are no approved plans for future redevelopment that would alter the current zoning, the existing or planned land uses, nor the vision for the site under the various relevant land use studies.

6.2.4.2 Landover Alternative

Zoning

405

The site is zoned as M-X-T. This zoning mandates that at least two of the following categories must be present on the site (1) retail businesses; (2) office/research/industrial; or (3) dwellings, hotel/motel. The Landover Alternative would satisfy only the office use category. As a result, there could be indirect, long-term, adverse impacts to land use and zoning if the site were under private ownership.

LANDOVER SPECIAL STATUS SPECIES ENVIRONMENTAL CONSEQUENCES SUMMARY

No-action Alternative: No measurable impacts.

Landover Alternative: No measurable impacts.

LANDOVER ZONING ENVIRONMENTAL CONSEQUENCES SUMMARY

No-action Alternative: No measurable impacts to zoning.

Landover Alternative: No measurable impacts to zoning.

LANDOVER LAND USE ENVIRONMENTAL CONSEQUENCES SUMMARY



No-action Alternative: No measurable impacts.



Landover Alternative: Direct, long-term, beneficial and adverse impacts.

Development on a federally controlled site is not subject to zoning; however, GSA and the exchange partner would cooperate with state and local officials through the development process to ensure compatibility with surrounding development. Therefore, under the Landover Alternative, there would be no measurable impacts to zoning.

Transportation Mitigation

The recommended transportation mitigations as shown in figure 6-40, would result in property takings that would alter land use along roadways recommended for improvement to mitigate traffic impacts in the study area. The proposed recommended mitigation measures may require property strip takings at three intersections: Landover Road and Brightseat Road, the Brightseat Road and Site South Access road, and Brightseat Road and Arena Drive. The Landover Road and Brightseat Road mitigation measures would impact the eastbound approach addition of a new lane beginning 400 feet west of the intersection and continuing 560 feet east of the intersection. The impacts at this intersection would also include a new lane added to Brightseat Road in the northbound direction beginning 360 feet prior to the intersection. Lastly, the Brightseat Road and Site South Access intersection impact would include the 400-foot exit-only driveway between the intersection and Landover Road underpass.

In total, three parcels would be impacted by these mitigation measures, resulting in direct, long-term, adverse impacts. All parcels are owned by commercial entities; two are currently commercial properties while one is industrial. During the design phase, the property impacts would be refined to minimize property takings and use design measures that could lessen the impact, such as narrowing travel lanes or shifting the roadway alignment.

Regional and Local Land Use Studies

Plan Prince George's 2035

The Landover Alternative would align with some of the land use goals outlined in Plan Prince George's 2035. The Landover Alternative would align with the plan's goals to transform Landover into a viable economic engine by providing a competitive office complex, centralizing a multitude of jobs, and thereby fostering economic development in proximity to the site. The Landover Alternative would also facilitate the goals of Plan Prince George's by strengthening the value of the neighborhood by contributing economically and restoring degraded resources by redeveloping the previous site of the Landover Mall. Impacts to land use at the Landover site as they relate to alignment with Plan Prince George's 2035 would be direct, long-term, and beneficial.

However, for some issues, the Landover Alternative would not align with the goals of Plan Prince George's 2035. Consolidating the FBI HQ at the Landover site would not promote higher density, compact, mixeduse developments as outlined in the goals for Plan Prince George's 2035; instead the site would contain an ample of amount of unused space and, in order to comply with the requirements of an Interagency Security Committee (ISC) Level V facility, would not be designed in a compact manner. Furthermore, the site would be designated for a single use. The Landover Alternative would not promote walkable communities, nor would it enhance the mobility and connectivity between neighborhoods, employment centers, cultural historic resources, and regional attractions because a perimeter fencing and security setbacks would isolate the site from the surrounding community. Because some elements of the Landover Alternative would not align with the goals of Plan Prince George's 2035, there would be direct, long-term, adverse impacts to land use.

Landover Gateway Sector Plan and SMA

The Landover Alternative, would align with some of the land use goals outlined in Landover Gateway Sector Plan and Sectional Map Amendment (hereafter referred to as the Landover Sector Plan). Goals of the Landover Sector Plan include building a new downtown that would facilitate economic growth and redeveloping the site previously occupied by the Landover Mall. The Landover Alternative would completely fulfill the goal of redeveloping the site, but would only moderately fulfill the goal of building a new downtown. Although the consolidation would provide an office complex that would move a large employer to the area and foster economic growth, it would not contain the uses or density to qualify as a downtown. As a result of these alignment with elements of the Landover Sector Plan. impacts to land use at the Landover site would be direct. long-term, and beneficial.

However, the Landover Alternative would not align with other goals of the Landover Sector Plan. The Landover Sector Plan calls for a mix of land uses on the site, including high density residential; office, retail, and residential; office/hotel; medium density residential; office/high density residential; and government/ office/educational/hotel/cultural/retail. The Landover Alternative would only provide a single use, Federal office space. Other goals mentioned in the Landover Sector Plan include creating a vibrant new downtown in the area on and around the site of the former Landover Mall; improving connectivity by creating a network of pedestrian friendly streets; and integrating open spaces, green connections, and public focal places into the Landover Gateway's neighborhoods.

The Landover Sector Plan designates the site of the former Landover Mall as the focal point of development that would provide a network of pedestrian friendly streets as well as a mix of uses. The Landover Alternative would discourage this type of development because the HQ would consume the entire site for one purpose, and public access to the site would be restricted. This type of development would also limit connectivity between developments in Landover. especially the east-west connections outlined in the Landover Sector Plan between the site of the former Landover Mall to the west and Woodmore Towne Centre to the east of the Capital Beltway. Although the Evarts Street Bridge is recommended as a transportation mitigation measure, other possible connections would be unlikely because the site design and limited public access would discourage walkability and reduce connectivity through the site. The lack of mixed uses, pedestrian amenities and inadequate connections through the site in conjunction with the restriction of public access to the site, would result in a direct, long-term, adverse impacts to land use in Landover.

Comprehensive Plan for the National Capital Region

The Landover Alternative, would fulfill some of the objectives of Federal Elements of the Comprehensive Plan for the NCR. The Landover Alternative would enhance operational efficiencies and contribute to developing the economy in Landover area. As a result of the alignment with some elements of the Federal Elements, impacts to land use at the Landover site would be direct, long-term, and beneficial.

However, the Landover Alternative does not align with the Federal Element goal regarding public transportation. Although the Landover site is located near multiple bus routes, the site is just under 2 miles from the closest Metrorail station, which would be disadvantageous for employees and visitors commuting to the Landover site using public transit. Additionally, the Landover Alternative does not utilize underdeveloped Federal sites or available space in Federal buildings as recommended in the Federal Elements. Because the Landover site would be inconsistent with some elements of the Federal Elements, impacts to land use at the Landover site would be direct, long-term, and adverse.

6.2.5 Visual Resources

The following sections describe the environmental consequences for visual resources under both the No-action Alternative at Landover and the Landover Alternative.

VISUAL RESOURCES ASSESSMENT OF SIGNIFICANCE

Impacts to visual resources would not result in significant impacts, as defined in section 3.6.3.

6.2.5.1 No-action Alternative

Under the No-action Alternative at the Landover site, there would be no measurable impacts to visual resources because there are no approved plans for future redevelopment that would alter the aesthetics or existing views of the site.

6.2.5.2 Landover Alternative

Based on the conceptual site plan and preliminary estimates, the Main Building, which would be constructed within the 15.81-acre Main Building Developable Area, is assumed to have a maximum building height of approximately 11 stories in the Draft EIS. Parking structures at the site are assumed to not exceed 10 stories while the Central Utility Plant (CUP), Remote Delivery Facility (RDF), gatehouses, and visitor's center would not exceed 2 stories in height. In order to envisage the visibility of the Main Building to the surrounding area, a viewshed analysis for the Landover site was completed for the Main Building Developable Area in ArcMap. The analysis applied the assumed Main Building height (154 feet) to the entirety of the Main Building Developable Area, and calculated views based on the existing ground topography and the obstruction caused by trees in the viewshed. Considering the elevation of the building footprint and surrounding area, the Landover Alternative would be visible from most locations within 0.25 mile. It would be highly visible from the Capital Beltway and Landover Road because of their location adjacent to the site. The results of the viewshed analysis for the Landover site is shown in figure 6-28.

Under the Landover Alternative, there would be direct, long-term, adverse impacts to visual resources. The height of the Main Building would be distinctively higher than the surrounding area, aside from FedExField, which stands 128 feet high as a seven level stadium (Clark Construction 2014). Although the height of the Main Building would be noticeably different than the surrounding area, it would consistent with the overall visual character of this portion of Prince George's County, in which isolated, tall buildings dot the skyline along the Capital Beltway. The height of the remaining buildings would be more in line with the visual character of the surrounding area because they would not exceed 2 stories. Therefore, under the Landover Alternative, there would be direct, long-term, adverse impacts to visual resources.

The Landover site would be visually distinct from the residential developments to the north and west of the site, but would blend in with existing commercial and industrial development throughout the vicinity. Likewise, density changes would be noticeable but would also correspond with the commercial and industrial development throughout the rest of the area. Notwithstanding the adverse impacts, the changes in the visual character of the Landover site are envisioned for the North Core by Prince George's County as outlined in the Landover Sector Plan and Plan Prince George's 2035 and other local and regional planning initiatives. Furthermore, the transition from an overgrown and barren vacant lot and empty mall to a state of the art government campus would have direct, long-term, beneficial impacts to visual resources.

LANDOVER VISUAL RESOURCES ENVIRONMENTAL CONSEQUENCES SUMMARY



No-action Alternative: No measurable impacts.

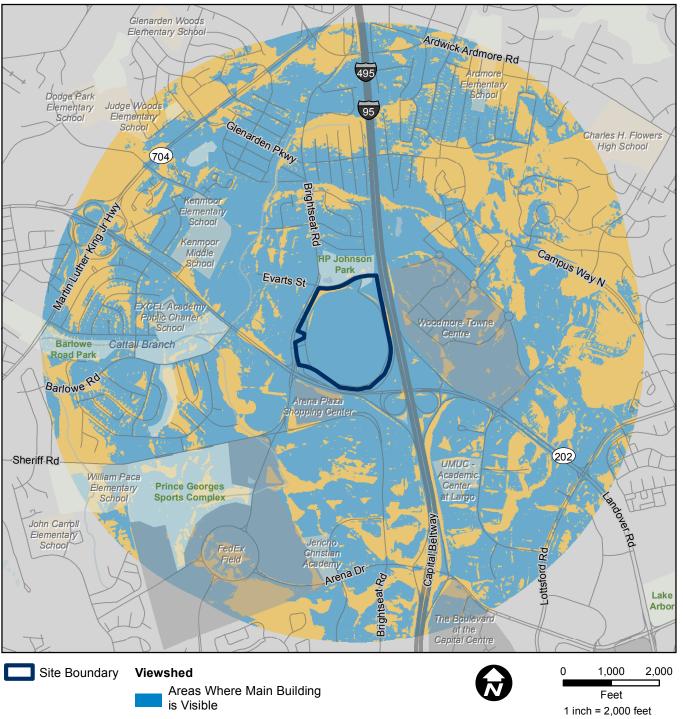


Landover Alternative: Direct, long-term, beneficial and adverse impacts.

FULL CUT-OFF

A light system that prevents light from being cast upward or outward and therefore contributing to light pollution. No light is emitted directly from the luminaire into the sky.

Figure 6-28: Landover Viewshed Analysis



Shadow Analysis

In order to complement the visual analysis, a shadow analysis was performed to estimate how shadows cast by the Main Building may impact the surrounding area, as described in section 3.6. Using ArcScene, a sun-shadow analysis model was created to determine shadows that would be cast by the Main Building at the Landover site. As shown in figure 6-29, shadows are more pronounced in the winter than in the summer. During winter mornings, long shadows would extend to the west/northwest of the Main Building and would potentially cover a small portion of Brightseat Road, however they would not be expected to impact the Maple Ridge apartment complex. During winter evenings, long shadows would extend to the northeast of the building onto the Capital Beltway. The results of the shadow analysis for the Landover site are shown in figure 6-29.

Lighting

Due to security requirements, the consolidated FBI HQ would be a well-lit facility, with a minimum of 1 foot candle across the entire site during non-daylight hours. Full cut offs would be used to minimize light pollution to the surrounding area. Illumination from the consolidated FBI HQ would have an additive effect with the lighting along Landover Road and the Capital Beltway. It is unlikely that this lighting would be noticeable within adjacent neighborhoods. The Landover site was previously a shopping mall, so although lighting levels at the site would be comparable to when the shopping mall was in operation, when compared to the No-action Alternative, under which the site is not lit, there would be a direct, long-term, adverse impacts to visual resources resulting from increased lighting levels at the Landover

site. It is not expected that additional impacts to visual resources would result from the implementation of the recommended traffic improvements. There could be direct, long-term, adverse impacts to visual resources resulting from the lighting along the new south exit road, but given the already high levels of ambient lighting from Landover Road, the Capital Beltway, and Arena Plaza there are no additional impacts to visual resources expected. All recommended mitigations, including the construction of the south exit road, would occur in areas.

Transportation Mitigation

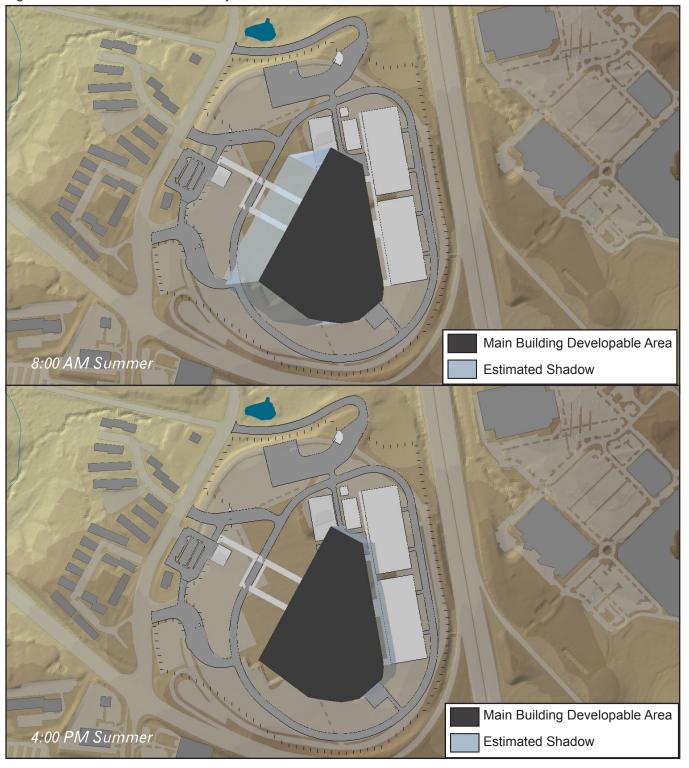
There would be no measurable impacts to visual resources associated with the recommended traffic mitigation measures within the transportation study area, as shown in figure 6-40. All mitigation measures requiring construction would be along the existing roadways, with minimal tree clearing and lighting continuing to be confined to the existing transportation corridor.

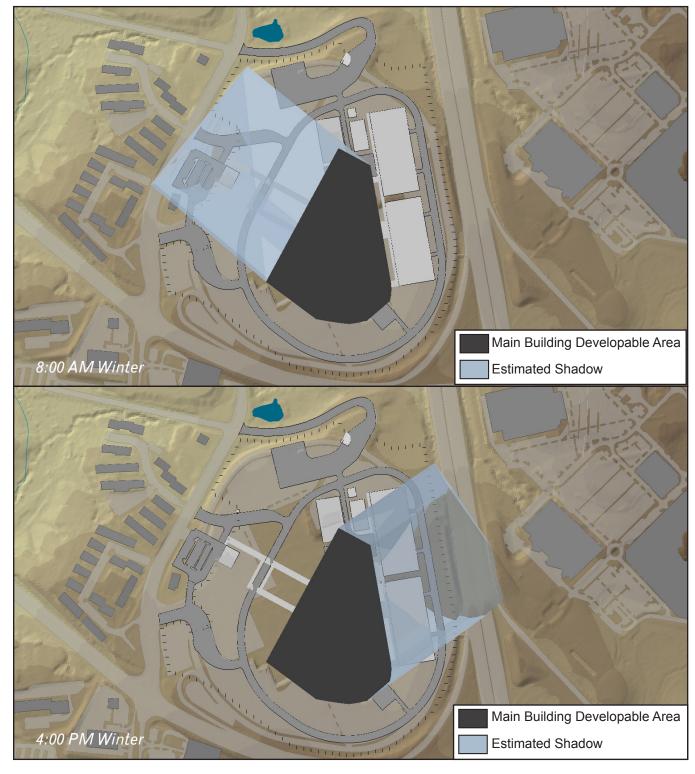
Areas Where Main Building

is Not Visible

ESRI (2013), GSA (2013) Prince George's County (2013)

Figure 6-29: Landover Shadow Analysis





LANDOVER ARCHAEOLOGY ENVIRONMENTAL CONSEQUENCES SUMMARY



No-action Alternative: No measurable impacts.



Landover Alternative: No measurable impacts.

LANDOVER HISTORIC RESOURCES ENVIRONMENTAL CONSEQUENCES SUMMARY



No-action Alternative: No measurable impacts.



Landover Alternative: No measurable impacts.

6.2.6 Cultural Resources

The following sections describe the environmental consequences for cultural resources under both the No-action Alternative at Landover and the Landover Alternative.

CULTURAL RESOURCES ASSESSMENT OF SIGNIFICANCE

Impacts to cultural resources would not result in significant impacts, as defined in section 3.7.3.

6.2.6.1 Archaeological Resources

No-action Alternative

Under the No-action Alternative at the Landover site, there would be no measurable impacts to archaeological resources because there would continue to be a low potential for intact artifacts at the site and there are no approved plans for future redevelopment that would disturb the ground surface.

Landover Alternative

Under the Landover Alternative, there would no measurable impacts to archaeological resources at the Landover site, because there is a low potential for intact resources to exist on the site due to previous disturbance.

Should there be an unanticipated discovery of archaeological resources during construction, GSA would continue Section 106 consultation with the MD SHPO and other parties through the standard review process under 36 CFR § 800. Through this ongoing process, any impacts to archaeological resources would be avoided or mitigated to the extent that they would not be measurable. This stipulation would be included in the Section 106 PA for the project.

6.2.6.2 Historic Resources

No-action Alternative

Under the No-action Alternative at the Landover site, there would no measurable impacts to historic resources, because no historic resources exist within the boundaries of the APE.

Landover Alternative

Under the Landover Alternative, there could be direct, long-term, adverse impacts to historic resources. As noted in section 4.7, GSA initiated consultation under Section 106 of the NHPA with the MD SHPO on May 14, 2015. On August 17, 2015, the MD SHPO commented on the potential for historic resources in the APE, noting that there would not be substantive historic preservation or archaeological resource issues.

Architectural resources 50 years of age or older within the APE are unlikely to be eligible for listing on the NRHP as historic districts or as individual resources. Regardless, visual impacts would be minimal. The consolidated FBI HQ would be visible from the Maple Ridge apartment complex because of its proximity to the Landover site. Views from Royale Gardens would be limited by H.P. Johnson Park, which is located between the Landover site and this neighborhood. Vegetative buffers along the perimeter of the former Palmer Park School and the Lansdowne apartment complex would also limit views toward the Landover site.

Although the Main Building would be taller than surrounding commercial buildings, the overall development of the Landover site would be in keeping with the character of the area and it is anticipated that the Landover Alternative would not visually impact any potential historic resource to the extent that it would diminish its integrity. The eligibility of these resources for listing in the NRHP is dependent on further agency consultation. In addition, any adverse impacts to historic resources in the APE would be mitigated by Section 106 consultation under the PA.

6.2.7 Socioeconomic and Environmental Justice

Impacts related to changes in population and demographics as a result of consolidating FBI HQ at the Landover site are considered in the context of the local economy of Prince George's County, the Washington, D.C., MSA, and the State of Maryland. Impacts to tax revenues, population, housing, schools, and community facilities and services of Prince George's County, the Washington, D.C., MSA and the State of Maryland, are all described qualitatively. Benchmarks for some impacts, such as impacts to construction employment, have been created by identifying the greatest annual change over a recent historical period to create a quantitative threshold for the magnitude of impacts to each resource. Impacts to Prince George's County and the Washington, D.C., MSA are similar to those described in the environmental consequences analysis for the Greenbelt site, described in section 5.2.7, and are incorporated by reference where applicable.

SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE ASSESSMENT OF SIGNIFICANCE

Impacts to socioeconomics and environmental justice would not result in significant impacts, as defined in section 3.8.3.

6.2.7.1 Population and Housing

No-action Alternative

Under the No-action Alternative at the Landover site, there would be no measurable impacts to population and housing because there are no approved plans for future redevelopment that would alter the current population and housing patterns in Prince George's County or the Washington, D.C., MSA.

Landover Alternative

Population

Impacts to the population of Prince George's County, and the Washington, D.C., MSA resulting from the Landover Alternative would be similar to those described for the Greenbelt site in section 5.2.7. Therefore there would be no measurable impacts to population in Prince George's County or the Washington, D.C., MSA under this alternative.

Housing

Impacts to housing in Prince George's County and the Washington, D.C., MSA would be similar to those described for the Greenbelt site in section 5.2.7. The total amount of employees that would relocate to the County from outside the County is unknown; therefore, the housing impacts of these relocations on Prince George's County cannot be assessed due to insufficient information at this time.

6.2.7.2 Employment and Income

No-action Alternative

Under the No-action Alternative at the Landover site, there would be no measurable impacts to employment and income because there are no approved plans for future redevelopment that would alter the current employment or income levels in Prince George's County or the Washington, D.C., MSA.

Landover Alternative

Construction and Operations-Related Spending

Impacts to construction and operations-related spending, construction employment and income, and operations-related employment and income in Prince George's County, and the Washington, D.C., MSA resulting from the Landover Alternative would be similar to those described for the Greenbelt site in section 5.2.7. However, under this alternative there would be indirect, short-term, beneficial impacts to Prince George's County and the Washington, D.C., MSA as a result of construction-related spending. Additionally, there would be indirect, long-term, beneficial impacts to both Prince George's County and the Washington, D.C., MSA as a result of operations-related spending.

Construction Employment

Similar to the Greenbelt Alternative, it is expected that there would be approximately 2.4 million gsf of construction under this alternative. This level of construction would require 6,720 full-time equivalent construction workers for a one-year period, resulting in approximately \$315 million in construction wages that would result directly from project spending. However, it is not likely that all 6,720 construction workers would be employed for only one year and, instead, the project would occur over multiple years which would reduce the impact to the local construction industry.

Similar to the findings under RFDS 1 and the alternatives at the Greenbelt site, most of the construction workforce is expected to come from within the Washington, D.C., MSA. However, due to the specialization requirements of some construction jobs and the high number of future construction projects, it is possible that some construction workers could relocate to the Washington, D.C., MSA in order to construct the facilities under this alternative during the construction period. Any temporary relocation of construction workers to the Washington, D.C., MSA would have direct, short-term, beneficial impacts to the local lodging, food and beverage, and retail sectors when these construction workers spend their income in the Washington, D.C., MSA.

LANDOVER POPULATION & HOUSING ENVIRONMENTAL CONSEQUENCES SUMMARY



No-action Alternative: No measurable impacts.



Landover Alternative: No measurable impacts to population in Prince George's County or the Washington, D.C., MSA. Impacts to housing in Prince George's County cannot be assessed due to insufficient information at this time.

LANDOVER EMPLOYMENT & INCOME ENVIRONMENTAL CONSEQUENCES SUMMARY



No-action Alternative: No measurable impacts.



Landover Alternative: Indirect, short- and long-term, beneficial impacts.

LANDOVER TAXES ENVIRONMENTAL CONSEQUENCES SUMMARY



No-action Alternative: No measurable impacts.



Landover Alternative: Indirect, short- and long-term, beneficial impacts to income and sales tax revenues. Indirect, long-term, adverse impacts to property tax revenues.

LANDOVER SCHOOLS & COMMUNITY SERVICES ENVIRONMENTAL CONSEQUENCES SUMMARY



No-action Alternative: No measurable impacts.



Landover Alternative: Insufficient information available to determine impacts to community services. No measurable short-term impacts to schools. Insufficient information available to determine long-term impacts to schools.

Operations Employment

Because current FBI HQ employees work within the Washington, D.C., MSA, there would be no new impacts to the Washington, D.C., MSA as a result of the employment of operations-related employees. There would be indirect, long-term, beneficial operations-related impacts to sales, income, and employment in Prince George's County as a result of commuting employees who spend their income locally during the workday and those employees who choose to relocate their primary residence to Prince George's County as a result of the project.

6.2.7.3 Taxes

No-action Alternative

Under the No-action Alternative at the Landover site, there would be no measurable impacts to taxes because there are no approved plans for future redevelopment that would alter the current sales, income or property tax levels in Prince George's County or the Washington D.C. MSA.

Landover Alternative

The transfer of the Landover site from a privately owned to a federally owned parcel would cause indirect, long-term, adverse impacts to property tax revenues in Prince George's County. As of the year 2015, there were \$361,339 in property taxes paid annually on this property, and no taxes would be paid if the site were to be transferred to the Federal Government (Prince George's County Property Tax Assessor 2015).

Impacts to sales and income taxes in Prince George's County and the Washington, D.C. MSA would be similar to those described under the Greenbelt Action Alternative and are listed in section 5.2.7.3. These increases in sales and income taxes would result in indirect, short- and long-term, beneficial impacts to tax revenues in Prince George's County.

6.2.7.4 Schools and Community Services

No-action Alternative

Under the No-action Alternative at the Landover site, there would be no measurable impacts to schools and community services because there are no approved plans for future redevelopment that would alter the current condition of schools and community services in Prince George's County or the Washington, D.C., MSA.

Landover Alternative

Impacts to schools and community services in Prince George's County and the Washington, D.C., MSA resulting from the Landover Alternative would be similar to those described for the Greenbelt Alternative in section 5.2.7.4. The Landover Alternative could result in the potential relocation of some of the current FBI HQ's total employed workforce. Some of these employees could relocate with their families. However, as described in the Population and Housing analysis, it is assumed that many of these employees currently reside in the Washington, D.C., MSA and if they relocate their primary residences as result of this alternative, the new residence would likely be located within the Washington, D.C., MSA. Therefore, there is no net change in impacts, and, subsequently, there would no measurable impacts to schools in the Washington, D.C., MSA as a result of employees changing permanent residences within the Washington, D.C., MSA.

Some FBI HQ employees may choose to relocate to Prince George's County from outside of Prince George's County in order to be closer to the consolidated FBI HQ location under this alternative. Any movement of families into Prince George's County could have a direct, adverse impact to schools as a result of increasing the student load on the local school system until the system adjusts to the increase in the number of students and a direct, long-term, beneficial impact as a result of increased school funding through increased property taxes. However, there is insufficient information available at this time to determine the impact to schools in Prince George's County as we do know the number of persons that would relocate to Prince George's County as a result of this alternative.

The Landover Alternative could result in direct. short-term, adverse impacts to police services, fire and emergency services, and medical facilities by increasing the demand for these services during the construction period. However, there is insufficient information available at this time to determine these impacts as the amount of additional demand that would be placed on community services during the construction period is unknown. There would be no measurable impacts to schools in the shortterm. Impacts to community services as a result of employees permanently relocating to Prince George's County or the Washington, D.C., MSA are expected to be indirect, short-term, and adverse while these services adjust to changes in the level of the population to be serviced.

6.2.7.5 Recreation and Other Community Facilities

No-action Alternative

Under the No-action Alternative at the Landover site, there would be no measurable impacts to recreation resources or other community facilities because there are no approved plans for future redevelopment that would alter the current condition of recreation facilities in Prince George's County or the Washington, D.C., MSA.

Landover Alternative

Impacts to recreation resources and other community facilities in Prince George's County and the Washington, D.C., MSA resulting from the Landover Alternative would be similar to those described for the Greenbelt site in section 5.2.7.5. Both indirect, long-term, adverse and beneficial impacts to recreation resources and other community facilities could occur due to increased visitation at these sites and as a result of FBI Headquarters employees spending their income at these resources, respectively. However, there is insufficient information available at this time to determine the impacts that would occur to recreation and other community facilities under this alternative.

6.2.7.6 Environmental Justice

No-action Alternative

Under the No-action Alternative at the Landover site, there would be no change to employment, housing, income, population, schools, or community services in Prince George's County or the Washington, D.C., MSA. Therefore, there would be no measurable impact to low income or minority populations and no environmental justice impacts.

Landover Alternative

Of the 12 census tracts within 1 mile of the Landover site, there are 2 tracts that have relatively high minority populations and 20 percent of their population lives below the poverty line, and 10 tracts that have only relatively high minority populations. Therefore, all of the census tracts within 1 mile of the Landover site contain sensitive communities.

The Landover Alternative could result in the creation of jobs in Prince George's County as new businesses open to support construction workers and FBI HQ employees. These new businesses could beneficially impact the local community and the Washington D.C., MSA through the creation of new income, employment, and sales in both the short and long term. Some new construction-related jobs would also be created in the short term, which could result in the creation of additional income and employment for local residents. Some of the local residents that fill these jobs could come from the low-income or minority communities identified in section 6.2.7.6. However, actual hiring practices would be determined by the construction contractor for this project or by proprietors who own these businesses; therefore, it is not certain that any jobs created under this alternative would be filled by persons from low-income or minority communities.

Several neighborhoods reside directly west of the Landover site that could be impacted by construction and commuter traffic that would result from this alternative. Adverse traffic impacts under this alternative would be mitigated to the extent practicable and permitted by regulations to the No-build Condition or better than the No-build Condition. In addition, Brightseat Road, which is the access road servicing these neighborhoods, is expected to see higher construction and operations-related traffic. This road is classified as a collector under the Federal functional classification system for roadways. Because this road is a collector, even though traffic levels on the road would increase as a result of this alternative, it would perform up to its functional level as a result of this alternative. Therefore, there would be no adverse impacts related to traffic as the road would perform as it was designed under the Landover Alternative. and there would be no adverse impacts to sensitive communities located to the west of this site as result of transportation impacts.

Air quality impacts, while adverse, would disperse across an area wider than the 1-mile radius of the site used for the environmental justice analysis and would therefore impact more census tracts than those identified as Environmental Justice communities. Furthermore, National Ambient Air Quality Standards (NAAQS) would not be exceeded at the closest sensitive receptors (see figures 6-40 and 6-41). Because any air quality impacts would occur to census tracts both within and outside the 1-mile boundary of the Landover site, there would be no disproportionate impacts to sensitive populations. In addition, because NAAQS would not be exceeded. there would be no adverse impact. Therefore, there would be no environmental justice impacts under this alternative in the short term, and because there would be no adverse air quality impacts anticipated in the long-term, there would be no long-term environmental justice impacts resulting from air quality impacts.

Impacts from noise would be direct, short-term, and adverse during the short term. However, it is expected that construction crews would follow local noise ordinances, including timing of construction noise, to mitigate adverse impacts to sensitive populations.

Because there would be no long-term, adverse impacts to minority or low income communities under this alternative, and because indirect, short-term, adverse impacts would be mitigated to the extent practicable and permitted by law, no environmental justice impacts are anticipated under this alternative.

LANDOVER RECREATION & OTHER COMMUNITY FACILITIES ENVIRONMENTAL CONSEQUENCES SUMMARY

No me

No-action Alternative: No measurable impacts.



Landover Alternative: Insufficient information available to determine impacts.

LANDOVER ENVIRONMENTAL JUSTICE ENVIRONMENTAL AND PROTECTION OF CHILDREN CONSEQUENCES SUMMARY



No-action Alternative: No measurable impacts.

Landover Alternative: No shortor long-term adverse impacts to minority or low-income communities. No mitigation of disproportionate and adverse impacts to children is required under EO 13045.

6.2.7.7 Protection of Children

No-action Alternative

Under the No-action Alternative at the Landover site, there would be no measurable impacts to children because there are no approved plans for future redevelopment that would impact children living near the site or children attending childcare centers or schools near the site.

Landover Alternative

As described in section 6.1.7, six childcare centers reside in proximity to the Landover project site. Aunt Tia's Daycare, Kayla's Daycare, Rising Generations, and Park View Child Development Center reside along major roads within 1 mile of the project site. These roads could be used for construction traffic and would see an increase in commuter traffic as a result of this project. As Nana's Day Care is located in a residential community southwest of the project site and as Future Leaders Day Care is also located in a residential community northwest of the project site, no measurable impacts to these daycares are expected. As The Foundation Schools of Prince George's County. Kenmoor Elementary School, Excel Academy Public Charter School, and Jericho Christian Academy are not located off of any main road that would be impacted by the project, no measurable impacts to these schools would occur. Excel Academy Public Charter School and Kenmoor Middle School are located on major roads that could be used for construction traffic and may see an increase in commuter traffic as a result of this project.

Neighborhoods are located to the west and northwest of the project site. Children in these neighborhoods could be impacted by construction noise and air quality issues in the short term. However, any impacts to these neighborhoods would not disproportionately impact children; therefore, no measurable impacts to children would occur from noise and air quality impacts in the short term.

Under this alternative, some impacts to children, such as releases of odor and dust during the construction of the Landover site, may occur as a result of children living in the neighborhoods in proximity to the proposed location for this alternative. Additionally, an increase in traffic to and from the project site would impact children that are commuting or walking to school. However, these impacts would not have a disproportionately high and adverse impact to children. Therefore, no measurable impacts to children are expected to occur as a result of this alternative.

6.2.8 Public Health and Safety/ Hazardous Materials

The following sections describe the environmental consequences for public health and safety and hazardous materials under both the No-action Alternative at Landover and the Landover Alternative.

PUBLIC HEALTH AND SAFETY/ HAZARDOUS MATERIALS ASSESSMENT OF SIGNIFICANCE

Impacts to public health and safety would not result in significant impacts, as defined in section 3.9.3.

6.2.8.1 Public Health and Safety

No-action Alternative

414

Under the No-action Alternative at the Landover site, there would no measurable impacts to emergency services and life safety, because there are no approved plans for future redevelopment that would impact the demand or capacity for emergency services or increase the risk of harm to the public.

Landover Alternative

The Landover Alternative would involve the implementation of similar construction-phase life safety procedures to those described in section 5.2.9 for the Greenbelt site. As a result, there would be direct, short-term, adverse impacts to emergency services and life safety at the Landover site associated with on-site construction activities.

As a high profile Federal building, the presence of the FBI HQ at the Landover site could increase the potential for intentional destructive acts; however, the FBI would maintain a site-specific emergency response plan to minimize any potential risks to FBI employees or the public. Likewise, the response time and capacity of existing law enforcement, fire, and emergency response agencies is expected to be adequate at the Landover site.

Lastly, the operation of a firing range for employee use within the campus could pose safety concerns to employees using the facility. Public access would be restricted and employee use would to be consistent with Occupational Safety and Health Administration (OSHA) regulations (29 CFR Parts 1900–1999); however, a slight risk of injury would remain. Consequently, there could be direct, long-term, adverse impacts to emergency services and life safety at the Landover site.

Transportation Mitigations

The recommended traffic mitigation measures within the transportation study area would be beneficial to emergency services and life safety. Construction along approximately 1,890 linear feet of roadways requiring substantial widening, including along Landover Road, Brightseat Road, and the construction of a new connector road connecting the site south access to Brightseat Road, as shown in figure 6-40, would improve the flow of traffic and reduce response times for emergency vehicles. Therefore, impacts to emergency services/life safety associated with traffic mitigation measures would be direct, long-term, and beneficial.

6.2.8.2 Hazardous Materials

No-action Alternative

Under the No-action Alternative at the Landover site, there would be no measurable impacts to hazardous materials because there are no approved plans for future redevelopment that would disturb existing hazardous materials on the site.

Landover Alternative

Spill prevention and response procedures would be implemented at the Landover site similar to those described under the No-action Alternative at the Greenbelt site to prevent hazardous material spills such as vehicle and equipment fuels and maintenance fluids during both construction and operation of the consolidated FBI HQ campus. Compliance with these procedures would result in no measurable impacts associated with hazardous materials spills and cleanup at the Landover site.

A Phase I Environmental Site Assessment conducted at the Landover site in November 2014 documented potential contamination associated with previous automotive-related uses (Louis Berger 2014b). It is therefore possible that soil and groundwater at the site have been impacted by these previous uses. Additional subsurface investigations and potential remediation activities would be required to assess the magnitude of any contamination. The assessment also documented several off-site sources of potential contamination within the surrounding vicinity, but concluded that these did not have potential to affect the Landover site.

During operation of the facility, materials handling and storage protocols for the delivery and on-site use of hazardous materials (e.g., ammunition for the shooting range) would be implemented, minimizing the potential for adverse impacts to the extent that they are not measurable.

Transportation Mitigations

Impacts to hazardous materials could occur if the potential contamination discovered during the Phase I Environmental Site Assessment existed along the roadways recommended for widening or other improvements, as shown in figure 6-40. Additional subsurface investigations and potential remediation activities would be required before construction would occur, reducing the potential to introduce contamination into the environment.

LANDOVER PUBLIC SAFETY ENVIRONMENTAL CONSEQUENCES SUMMARY



No-action Alternative: No measurable impacts.



Landover Alternative: Direct, short-term, adverse impacts; direct, long-term, beneficial impacts.

LANDOVER HAZARDOUS MATERIALS ENVIRONMENTAL CONSEQUENCES SUMMARY



No-action Alternative: No measurable impacts.



Landover Alternative: No measurable impacts.

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6.2.9 Transportation

The Transportation impact analysis considers two conditions:

- No-build Condition assumes the FBI remains at the FBI HQ building in Washington, D.C., and the Landover site remains undeveloped.
- Build Condition is the consolidation of the FBI HQ at the Landover site.

The analysis of the No-build Condition serves as the baseline against which the impacts of the Proposed Action would be compared.

TRANSPORTATION ASSESSMENT OF SIGNIFICANCE

Impacts to transportation under both the No-action and Landover Alternatives would result in significant impacts to public transit and traffic as defined in section 3.10. Other resources considered under transportation would not result in significant impacts.

6.2.9.1 No-build Condition

This section introduces the No-build Condition for the Landover site, and provides a summary of each mode of travel and the potential impact caused if the Landover Alternative does not occur. This includes descriptions of the pedestrian network, bicycle network, public transit system, parking conditions, truck access, and traffic operations.

Planned Developments

According to the Landover Site Transportation Agreement (Appendix A), 12 planned developments are included as part of the No-build Condition. Table 6-12 provides the list of planned developments by name, type of construction, size and location as well as access and connection points. These developments range from small (7,000 SF of retail or 30,500 SF of office use) to large, mixed-use projects (up to 975,000 SF of office use or 560 residential units).

The developments would be located primarily east of the Capital Beltway, both north and south of Landover Road (MD 202), and all are shown in figure 6-30. All of the following information on these planned developments was gathered through a December 2014 meeting with Tom Masog, transportation supervisor at M-NCPPC.

Planned Roadway Improvements

According to the Landover Site Transportation Agreement (Appendix A), there are no planned roadway improvements; however, a new signalized intersection under construction was identified through field visits. The intersection is located along Brightseat Road between Landover Road and Sheriff Road and is assumed to serve the new planned residential development called Brightseat Road Property on the western side of Brightseat Road. The traffic signal for this intersection was added to the modeled network to provide the most accurate simulation possible, but the operations are not reported in this report.

417

Table 6-12: Landover Planned Developments

Name	Type of Construction/Size	Location/Primary Access
Woodmore Towne Centre	wne 975,000 SF of office, 50,000 SF of retail, 1,423 residential units, and a 360-room hotel Due east of the Landover site but separ Capital Beltway near the northeast corne and Landover Road interchange access Joseph's Drive from Landover Road	
Largo Park (Lots 3 and 4 Block D)	80,000 SF of office, 9,000 SF of retail, 318 residential units, and 10,000 SF of restaurant space	Northwest corner of the Arena Drive and Lottsford Road intersection. It is assumed that the property would be accessible from both roadways.
King Property	202,000 SF of office, 202,000 SF of retail, and 210 apartment units	Between Lottsford Road and St. Joseph's Drive east of Landover Road and would be accessible through Ruby Lockheart Boulevard from either Lottsford Road or St. Joseph's Drive
Balk Hill Village	between the proposed King Property developm Campus Way east of the existing Woodmore Centre accessible from St. Joseph's Drive or Campus Way North.	
Hunters Ridge	323 residential units	Near the northwest corner of Landover Road and 75th Avenue intersection accessible through 75th Avenue.
Largo Park (Lot 5 Block B)	144,000 SF of office	Near the southwest corner of the Lottsford Road and Landover Road intersection. It is assumed the property would be accessible from Lottsford Road across from Lottsford Court.
Englewood Business Park (Lot 43)	60,100 SF of flex office (half office and half warehouse)	Southwest corner of the Lottsford Road and McCormick Drive intersection. It is assumed the property would be accessible from both roadways.
Englewood Business Park (Lot 27)	60,100 SF of flex office (half office and half warehouse)	Near the northeast corner of the Lottsford Road and Apollo Drove intersection, north of Arena Drive. It is assumed the property would be accessible from Lottsford Road.
Englewood Business Park (Lots 51 and 52)	7,000 SF of retail	Near the southwest corner of the Lottsford Road and Lottsford Court intersection. It is assumed the property would be accessible from Lottsford Road.
Englewood Business Park (Lots 31, 32, and 35)	144,800 SF of office	Along Peppercorn Place south of Landover Road and west of McCormick Drive. It is assumed the property would be accessible from Peppercorn Place.
Corporate Center (Lot 4)	123,000 SF of light industrial space	Brightseat Road south of Arena Drive.
Brightseat Road Property	380 residential units	Northwest corner of Brightseat Road and Sheriff Road. The proposed property would be accessible from Brightseat Road and Barlowe Road.

[50] Dodge Park Elementary Judge Woods M Landover 495 Glenarden Pkwy 95 Charles H. Flower High School 704 Hunters Woodmore Ridge Elementary **Towne Centre** School - Phase II Middle Campus Way N Ruby Lockh HP Johnson Park Evarts St **Prince Georges** Country Club Kentland EXCEL Academy Balk Park Public Charter Woodmore Towns Hill Centre Cattail Branch Village Barlowe Columbia Park Rd **Road Park** Barlowe Rd **⊚**King Brightseat Elementary School 202 Lottsford Rd Road Property hopping Center Property Sheriff Rd Lots 31, 32, and 35 Academi Center **Prince Georges** at Largo & Lots 51 and 52 O Block B Highland Park Sports Complex School Academy _Sheriff-Rd-John Carroll Englewood **Business Park** Largo Park School FedEx Field Lot 43 (Lot 27 Lake Corporate Arbor O Block D Highland Park Center Elementary School Site Boundary 1,000 2,000 3,000 **Englewood Business Park Development** Feet 1 inch = 2.000 feet Largo Park Development Other Planned Development

Figure 6-30: Landover No-build Condition Planned Development Locations

No-build Condition Pedestrian Network

According to the Maryland Department of Transportation (MDOT)/ SHA 2015-2020 Transportation Improvement Program (MDOT with Maryland SHA 2014), several regional and Prince George's County funding categories include funds for sidewalk, signing, lighting, pedestrian crossing, safety improvements, ADA improvements or retrofits, and/or traffic management improvements to benefit pedestrians. Specific details are not available about what projects would receive these funds. Some improvements could also be made to the existing pedestrian network with the addition of proposed development projects in proximity to the alternative site, such as the Brightseat Road Property project, located at the northwest corner of Brightseat and Sheriff Roads.

Overall under the No-build Condition, impacts to pedestrians near the Landover site would have no measurable direct impacts because the majority of planned projects and associated trips from No-build Condition projects would be east of the Capital Beltway. The small increase in vehicular traffic in the study area would not affect pedestrians crossing at the intersections closest to the Landover site and would not affect pedestrians' access to the surrounding street network, due to pedestrian crossings and sidewalks still providing connections. Additionally, pedestrian conditions near the Landover site would remain primarily the same with the existing crossings and sidewalks providing connections.

Sources: ESRI (2013), GSA (2013), Prince George's County (2013), M-NCPPC (2014)

No-build Condition Bicycle Network

The Prince George's County Bikeway Master Plan recommends several new bicycle lanes and multi-use paths (or sidepaths) within the Landover study area, including three roads with bicycle lanes, one road with a multi-use path, and a multi-use path along the Cattail Branch River (see table 6-13 and figure 6-31) (Prince George's County 2009). Because there is no dated implementation associated with this plan, it is unclear if any recommendations would be completed by 2022.

Therefore, the No-build Condition would have no measurable direct impacts to bicycle conditions in the study area unless planned bicycle improvements are implemented. If any of the bicycle facilities listed were implemented by 2022, they could have a direct, long-term, beneficial impact to the bicycle network.





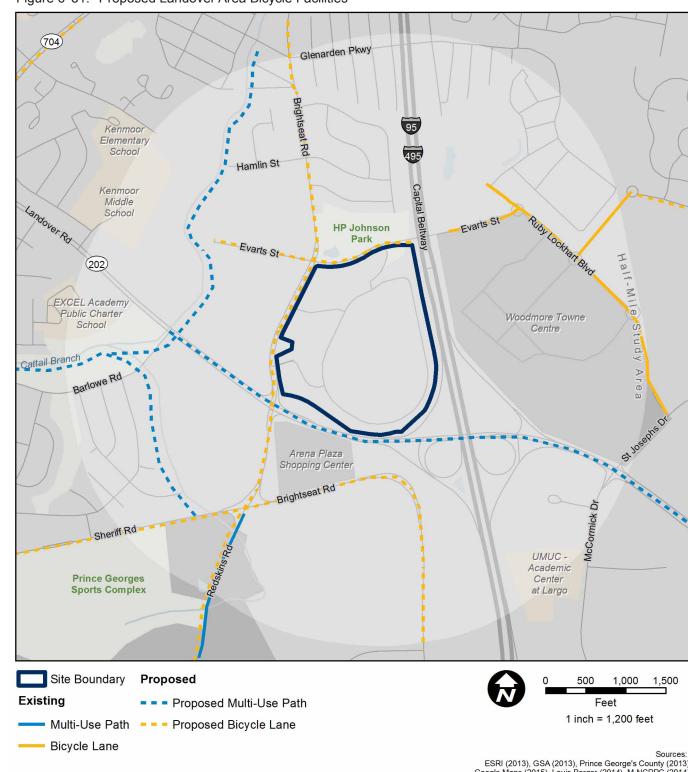
No-build Condition: No measurable impacts.

Table 6-13: Proposed Bicycle Facilities in the Landover Study Area

Roadway	From/To	Туре	Future Status	Notes
Landover Road (MD 202)	Barlowe Road to Central Avenue (MD 332)	Multi-Use Path	Proposed	Portions adjacent to Landover site
Cattail Branch River	Martin Luther King Jr. Avenue (MD 704) to Glenarden Parkway; Sheriff Road to Barlowe Road	Multi-Use Path Proposed		
Brightseat Road	Landover Road to Ardwick-Ardmore Road	Bicycle Lane	Proposed	Portions adjacent to Landover site
Redskins Road	Landover Road to Central Avenue (MD 332)	Bicycle Lane	Proposed	
Evarts Street/ Campus Way	I Bicycle		Proposed	Portions adjacent to Landover site

^aSmall segment currently exists between Capital Beltway and Ruby Lockhart Boulevard. Source: Prince George's County 2009

Figure 6-31: Proposed Landover Area Bicycle Facilities



ESRI (2013), GSA (2013), Prince George's County (2013) Google Maps (2015), Louis Berger (2014), M-NCPPC (2014)

No-build Condition Public Transit

The following sections describe the No-build Condition for the Metrorail and bus modes within the Landover study area.

Projected Transit Growth

Growth in the transit mode was calculated for the year 2022 using regional transit growth rates and projected ridership associated with large planned projects in proximity to the site. Refer to section 3.10.4.3 for more detailed information about the Metrorail and bus growth calculations.

One proposed development, Largo Park, is the only planned development that has projected transit trips located in proximity to the Largo Town Center Metro Station. Transit trips associated with this project were calculated based on Institute of Transportation Engineers (ITE) trip generation rates and the transit mode split determined in the traffic analysis section of this document (section 6.2.8.2) and the Landover Site Transportation Agreement (Appendix A). Prince George's County offers up to a 20 percent peak hour transit credit for development projects located near transit. The Largo Park mode split assigned 10 percent of AM peak hour and PM peak hour trips to transit, given its distance (1/3 mile) to Largo Town Center Metro Station. The transit mode split was further disaggregated (divided) into bus trips and Metrorail trips using bus and subway proportions from the 2009-2013 American Community Survey means of transportation data for the census tract containing the study area (U.S. Census Bureau 2009-2013).

Metrorail trips associated with Largo Park were added to projected growth at Largo Town Center Metro Station; however, bus trips were not added to ridership on routes serving the Landover study area because none of these routes serve Largo Park or the Largo Town Center Metro Station.

Metrorail Analysis

The Metrorail analysis was conducted using projected ridership growth in the system at the Largo Town Center Metro Station and ridership created by the one planned development project in the study area that would have transit trips.

Ridership Growth from Planned Projects

As previously mentioned, additional transit trips associated with the Largo Park development project were added to future projected ridership at Largo Town Center Metro Station. The peak hour non-Single Occupant Vehicle (SOV) trips associated with the development (see section 4.4.1, Projected Transit Growth, Landover TIA [Appendix D]) were disaggregated into peak hour Metrorail trips using subway proportions from the 2009-2013 American Community Survey (U.S. Census Bureau 2009-2013) transportation data for the census tract containing the development. The American Community Survey is an on-going annual sampling of demographic data across the United States conducted by the U.S. Census Bureau. The peak hour Metrorail passenger trips were then disaggregated into peak AM and PM 15-minute totals using the current AM and PM peak hour factors (PHF) at the station (WMATA 2014k).

A PHF is the proportion of peak hour ridership that occurs during the peak 15-minute period in that hour. The additional Metrorail trips associated with the Largo Park development project are summarized in table 6-14. The station platform capacity analysis and the fare vending analysis uses AM peak 15-minute ridership, and the station vertical element and faregate capacity analysis, the passenger load analysis, and the emergency evacuation (NFPA 130) analysis use the PM peak 15-minute ridership.

Regional Transit Growth Rate

Background ridership growth at the station for 2022 was calculated based on the 2.1 percent Metrorail growth rate from the MWCOG travel demand model. Table 6-15 summarizes projected 2022 weekday entries at Largo Town Center Metro Station, including background growth and growth from planned projects. Average weekday exits are assumed to be the same or comparable to average weekday entries.

Metrorail Passenger Loads

Refer to section 3.10.4.3 for a detailed explanation of how Metrorail passenger loads were calculated. At Largo Town Center Metro Station, PM peak period exits were the highest of AM peak entries, AM peak exits, PM peak entries, and PM peak exits, and therefore were used to calculate maximum passenger loads.

Table 6-14: Projected Trips Associated with Largo Park Project

Period	Largo Park Total Non-SOV Trips Per Hour			Metrorail Proportion of Non-SOV Metrorail Passenger Trips Per Hour Per Hour		Peak Hour Factor	Metror	ail Passenge 15-Minute			
	IN	OUT	TOTAL	OI NOII-SOV	Exits	Entries	Total		Exits	Entries	Total
AM Peak	19	15	34	63.9%	12	10	22	27.1%	3	3	6
PM Peak	19	20	39	63.9%	12	13	25	29.9%	4	4	8

Source: WMATA (2014b); Masog (2014)

Projected passenger loads by 2022 at the station are below 120 passengers per car, or what WMATA considers to be capacity. Table 6-16 summarizes passenger loads per car in 2022 under the No-build Condition using PM peak 15-minute exits.

Metrorail Station Capacity Analysis

Refer to section 3.10.4.3 for a detailed description of how station capacity was analyzed. Table 6-17 summarizes ridership growth during the peak exiting periods at Largo Town Center Metro Station.

Table 6-18 summarizes ridership growth during the peak entering period at Largo Town Center Metro Station.

Overall, vertical elements, faregate aisles, and fare vending machines at the station are projected to operate within capacity, or below a v/c of 0.7, which is considered capacity. Additionally, platform peak pedestrian LOS (based on the available spacing between passengers) on the busiest platform sections is projected to be at the acceptable LOS B. Further details on the station capacity analysis and emergency evacuation analysis are found in the Landover TIA (Appendix D).

Table 6-15: Weekday 2022 Projected Metrorail Ridership at Largo Town Center Metro Station

	Average Weekday Entries					
Metro Station 2014		2022 with Background Growth	2022 Development Projects	2022 Total No-build		
Largo Town Center	4,740	5,585	22	5,607		

Source: Masog (2014), M-NCPPC (2014a); WMATA (2014k); MWCOG (2015)

Table 6-17: Weekday Peak 15-Minute Exiting Period Ridership Growth

Metro Station	Time	2014		2022 N	lo-build
Metro Station	Tillle	Entries	Exits	Entries	Exits
Largo Town Center	5:00 PM – 5:15 PM	37	356	48	423

Source: WMATA (2014k); MWCOG (2015)

Table 6-18: Weekday Peak 15-Minute Entering Period Ridership Growth

Motro Station	Timo	2014		2022 No-build	
Metro Station Time		Entries	Exits	Entries	Exits
Largo Town Center	7:30 AM - 7:45 AM	327	37	388	46

Source: WMATA (2014k); MWCOG (2015)

Table 6-16: Projected Maximum Metrorail Passenger Loads at Largo Town Center Metro Station

Measure (PM Peak 15-Minute Exits)	Unit
2014 Maximum 15-minute Passengers	356
2022 Passengers with Background Growth	419
2022 Passengers with Development Projects	4
2022 Total No-build Passengers	423
2022 Minimum Trains ^a	3
2022 Train Cars ^b	20
2022 No-build Maximum Passengers Per Car	21

^a A 4-minute headway equates to 3.75 trains every 15 minutes. This figure was rounded down to 3 minutes in order to provide the most conservative load estimate.

MWCOG (2015)

^b Assuming one eight-car train (Blue line) and two six-car trains (Silver line) at Largo Town Center.
Source: Masog (2014), M-NCPPC (2014a). WMATA (2014k);

LANDOVER PUBLIC TRANSIT ENVIRONMENTAL CONSEQUENCES SUMMARY

No-build Condition: Direct, longterm, adverse impacts to public transit capacity, and direct, longterm, major adverse impacts to bus operations.

Bus Analysis

For this analysis, it was assumed that there would be no major changes in bus service in the study area by 2022. The overall analysis was limited to Metrobus service because no ridership data were available for TheBus. It can be assumed, however, that TheBus would see some minimal increases in ridership on routes that serve the site.

To calculate peak hour bus volumes within the study area, the 2014 maximum weekday passenger loads for each route and direction at stops within the study area were averaged by stop, and then this figure was multiplied by the number of peak bus trips per hour to calculate ridership per peak hour by route and direction. These totals were then grown to the year 2022 using the 1.9 percent annual regional growth rate for the bus mode referred to in section 3.10.4.3. The 2022 totals were then summed to calculate a total ridership per peak hour for the study area. As noted previously, bus trips for the Largo Park development project were not added to ridership on routes serving the Landover study area because none of these routes serve Largo Park or the Largo Town Center Metro Station.

To calculate the peak hour capacity of bus services within the study area, the capacity per trip of each bus route during the peak hour was multiplied by the number of trips scheduled in the peak hour. Capacities per trip for each Metrobus route were based on the typical number of seats available on each trip and the WMATA load standard (WMATA 2013).

Total 2014 peak hour bus ridership (Existing Condition) and projected 2022 peak hour bus ridership (No-build Condition) are summarized in table 6-19. Both 2014 and No-build 2022 bus ridership are below the overall calculated capacity of bus services in the study area, meaning the additional passenger trips projected can be adequately handled by current service levels. At the individual route level, however, Route F14 in the northbound direction is projected to be slightly over capacity by 2022 within the study area. Further details on the bus capacity analysis are found in Appendix D.

The Landover TIA (Appendix D) contains the Largo Town Center Metro Station bus bay analysis and further details on the bus capacity analysis.

Summary of Transit Analysis

The increase in public transit trips in the No-build Condition would have the following impacts to transit:

- Metrobus Route F14 would have capacity issues that are not present in the Existing Condition. The overall capacity of bus services in the study area, however, would accommodate the projected ridership.
- Metrorail passenger loads through the study area are projected to remain at acceptable levels.
- Metrorail vertical elements are projected to continue to operate below capacity.
- Metrorail faregate aisles and fare vending machines would continue to operate below capacity.
- Metrorail platform peak pedestrian LOS (based on the available spacing between passengers) on the busiest platform sections are projected to continue to be at the acceptable LOS B.
- Platform and station evacuation times would remain the same as existing conditions, continuing to meet NFPA 130 standards.
 WMATA Metrorail stations, however, are not required to meet NFPA 130 standards.

Therefore, the No-build Condition would have a direct, long-term, adverse impacts to public transit capacity. In addition, public transit bus operations (more than three buses) would have direct, long-term, major adverse impacts caused by the potential traffic delays forecasted along Landover Road (see Appendix D, section 4.8, Traffic Analysis).

Table 6-19: Current and Projected Bus Ridership in the Landover Study Area

Measure	2014		2022 Background Growth		2022 Planned Development Projects		2022 Total No- build	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
Total Volume	210	226	243	262	0	0	243	262
Total Capacity	411	418	411	418	-	-	411	418
Volume to Capacity Ratio (V/C)	0.51	0.54	0.59	0.63	-	-	0.59	0.63

Note: Bus trips associated with the Largo Park development were not added because the site is outside of the study area. Sources: Masog (2014): WMATA (2014k): MWCOG (2015)

No-build Condition Parking

The No-build Condition and improvement projects would not increase public surface parking in the area around the site, nor would the condition decrease existing on-street parking, which is primarily limited to residential neighborhood streets. The private parking lot on the west side of Brightseat Road between Landover Road and Sheriff Road, which is sometimes used for game-day parking, would be developed into residential properties with parking intended for the residents and their guests (Brightseat Road Property).

With no other changes in land use or development within the parking 0.5-mile study area anticipated by 2022 except for this Brightseat Road Property project, there would not be a substantial increase in parking demand that would impact the area's parking facilities. Overall, the No-build Condition would have no measurable direct, long-term impacts to parking in the study area.

No-build Condition Truck Access

Truck access routes would not change under the No-build Condition. Therefore, there would be no measurable direct, long-term impacts to truck access under the No-build Condition.

No-build Condition Traffic Analysis

According to the Landover Site Transportation Agreement, two primary sources were relied on to develop the future No-build traffic volumes, an approved list of planned developments provided by M-NCPPC and background growth rates agreed between all parties (M-NCPPC, Maryland SHA, and EIS project team). The Landover Site Transportation Agreement can be referenced in Appendix A.

The following section describes the process for analyzing traffic for the No-build Condition and the results of the analysis.

Background Growth

Refer to section 3.10.4.3 for a detailed description of background growth and how it was calculated. Based on the agreed Landover Site Transportation Agreement, a 0.5 percent per year growth rate was applied for I-95 through trips, a 0.33 percent per year growth rate was applied for Landover Road and Brightseat Road, and a 1.0 percent per year growth rate was applied for Arena Drive (Appendix D). Since the traffic counts were obtained between November 2014 and February 2015, the background growth was forecasted out eight years (future horizon year is 2022) by using the compound formula. Table 6-20 summarizes the background growth rates applied to the study area network.

423

Table 6-20: Landover Background Roadway Growth Rates

Roadway	Annual Growth Rate	Eight- Year Growth
I-95/I-495	0.5%	4.07%
Landover Road/ Brightseat Road	0.33%	2.67%
Arena Drive	1.0%	8.29%

LANDOVER PARKING ENVIRONMENTAL CONSEQUENCES SUMMARY

No-build Condition: No measurable impacts.

LANDOVER TRUCK ACCESS ENVIRONMENTAL CONSEQUENCES SUMMARY

No-build Condition: No measurable impacts.

U.S. General Services Administration

Table 6-21: Landover No-build Condition Planned Development Trips

PRO JECT	AM Peak Hour Trips			PM Peak Hour Trips		
PROJECT	IN	OUT	TOTAL	IN	OUT	TOTAL
Woodmore Towne Centre						
TOTAL VEHICLE TRIPS	1,276	672	1,948	837	1,352	2,189
Largo Park (Lots 3 and 4 Block D)						
TOTAL VEHICLE TRIPS	163	134	297	168	182	350
King Property						
TOTAL VEHICLE TRIPS	383	88	471	309	503	812
Balk Hill Village						
TOTAL VEHICLE TRIPS	34	140	174	134	72	206
Hunters Ridge						
TOTAL VEHICLE TRIPS	44	175	219	163	88	251
Largo Park (Lot 5 Block B)						
TOTAL VEHICLE TRIPS	231	25	256	45	195	240
Englewood Business Park (Lot 43)						
TOTAL VEHICLE TRIPS	65	8	73	13	56	69
Englewood Business Park (Lot 27)						
TOTAL VEHICLE TRIPS	65	8	73	13	56	69
Englewood Business Park (Lots 51 and 52)						
TOTAL VEHICLE TRIPS	8	5	13	20	21	41
Englewood Business Park (Lots 31, 32, and 35)						
TOTAL VEHICLE TRIPS	231	26	257	46	195	241
Corporate Center (Lot 4)						
TOTAL VEHICLE TRIPS	85	21	106	21	85	106
Brightseat Road Property						
TOTAL VEHICLE TRIPS	38	160	198	148	80	228

Trip Generation and Modal Split

The process to add each development for the No-build Condition followed the M-NCPPC/Prince George's County guidelines by using the County's prescribed trip generation formulas (M-NCPPC 2012). Depending on the type of development and size, the trip generation either relied on the Prince George's County trip rates or ITE trip rates. Prince George's County supplies trip rates for a number of typical land uses such as office and residential. The Landover TIA (Appendix D) contains the trip generation rates used to cover the planned developments.

Table 6-21 presents the planned development trip generation summary.

Trip Distribution

Once the number of trips was forecasted through trip generation the destinations covering the trips were assigned. This process followed two sources, a previous study covering the Woodmore Towne Centre and the MWCOG travel demand model trip tables from the Version 2.3.52 Travel Demand Model for 2020 (M-NCPPC 2012; MWCOG 2014c). The Woodmore Towne Centre transportation study provided distributions for office, retail, hotel, and residential uses. Because this development is one of the planned developments included in this study and is in proximity to the other planned developments east of I-95, the distributions were relied on to distribute the trips for all the planned developments east of I-95 and along Arena Drive. Table 6-22 contains the trip distributions by land use prepared through the Woodmore Towne Centre transportation study.

The two remaining planned developments located west of Brightseat Road relied on the MWCOG travel demand model trip tables (MWCOG 2014c). Table 6-23 contains the MWCOG travel demand model-based residential trip distribution.

Appendix A contains the maps for the Woodmore Towne Centre-based and MWCOG model distributions.

Complete No-build Condition

The planned developments, background growth, and planned roadway improvements were summed together to create the total background trip change between the Existing Condition and the No-build Condition. The Landover TIA (Appendix D) contains these combined total background trip AM and PM turning movement volumes, while Appendix A contains the individual planned developments and background growth turning movement volumes. The complete No-build Condition peak turning movement vehicle volumes covering all study area intersections and expressway facilities are shown in figure 6-32. Section 3.10.4.3 contains a description of the PHF and how it was used to provide a conservative traffic operations analysis.

Table 6-22: Trip Distributions by Land Use from Woodmore Towne Centre Transportation Study
Office Distribution Retail Distribution

Destination	Road	Distribu- tion
East MD (Local)	Landover Road	15.0%
Northeast MD (Local)	Lottsford Road	15.0%
Northeast MD (Local)	Campus Ways North	5.0%
Local points northeast of Woodmore Towne Centre	Varies	5.0%
North MD	I-95 / I-495	15.0%
West MD and Washington, D.C.	Landover Road	10.0%
Southeast (Local)	Lottsford Road	5.0%
Southeast (Local)	McCormick Drive	10.0%
South MD	I-95 / I-495	20.0%
TOTAL		100.0%

Destination	Road	Distribu- tion
Northeast MD (Local)	Lottsford Road	20.0%
Northeast MD (Local)	Campus Ways North	10.0%
Local points northeast of Woodmore Towne Centre	Varies	10.0%
North MD	I-95 / I-495	15.0%
Northwest MD (Local)	Glenarden Parkway	3.0%
West MD and Washington, D.C.	Landover Road	17.0%
Southeast (Local)	Lottsford Road	15.0%
South MD	I-95 / I-495	10.0%
TOTAL		100.0%

Table 6-23: Landover Residential Trip Distributions from MWCOG Travel Model

Destination	Road	Distribu- tion
West MD and Washington, D.C.	Landover Road	35.0%
East MD (Local)	Landover Road / Lottsford Road	2.0%
East MD(Local)	Landover Road	5.0%
Northeast MD (Local)	Brightseat Road	19.0%
South MD (Local)	Brightseat Road	3.0%
North MD	I-95 / I-495	17.0%
North MD	U.S. Route 50	3.0%
Site	N/A	1.0%
South MD and Virginia West	I-95 / I-495	15.0%
TOTAL		100.0%

Source: MWCOG (2014)

Residential Distribution

Destination	Road	Distribu- tion
Northeast MD (Local)	Lottsford Road	5.0%
Northeast MD (Local)	Campus Ways North	5.0%
North MD	I-95 / I-495	25.0%
Northwest MD (Local)	Glenarden Parkway	5.0%
West MD and Washington, D.C.	Landover Road	10.0%
Southeast (Local)	McCormick Drive	20.0%
South MD	I-95 / I-495	30.0%
TOTAL		100.0%

Source: M-NCPPC (2012); Prince George's County PD 2012

Hotel Distribution

Destination	Road	Distribu- tion
East MD (Local)	Landover Road	10.0%
North MD	I-95 / I-495	40.0%
West MD and Washington, D.C.	Landover Road	10.0%
South MD	I-95 / I-495	40.0%
TOTAL		100.0%

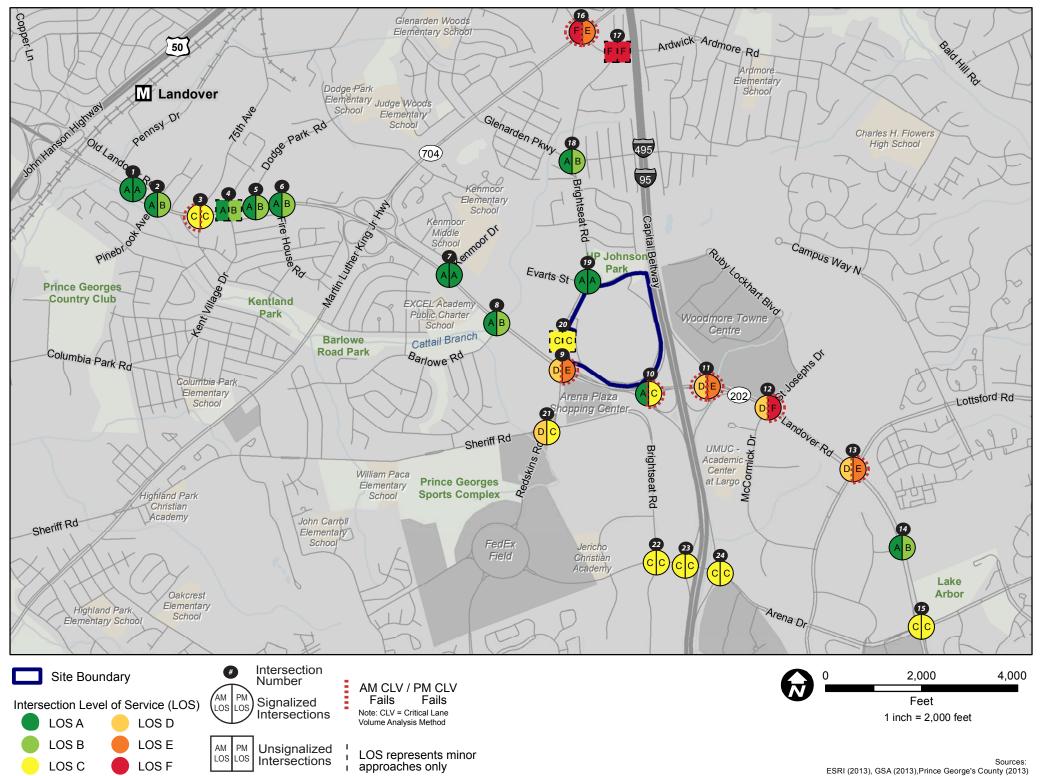
—146 (88) 84 (106) —233 (267) -141 (115) 70 (186) (14) (34) (109) 72 (95) -29 (51) -0 (2) -14 (30) 20 18 52 (plo Landover Road Landover Road Landover Road Landover Road 42 (64) 91 (152)____ 125 (237) 43 (69)___ 141 (98)____ 45 (85)____ 87 (123) ←2420 (1696) 199 (89) -263 (203) ____35 (50) 1633 (2572) 2472 (1879) 1612 (2282)------1795 (2554)-----1791 (2534)---1738 (2416)-1701 (2661) -----← 2629 (1757) ← 2342 (1581) | 1833 (2746) → ← 2684 (1897) **←**2526 (1734) **←**2383 (1820) 15 (34) 7 (12) 31 (52) 43 (74) 105 (207) 60 (61) 23 (42) 71 (107) 1 (0) Landover Road 216 (148)-40 (60)-64 (63)-52 (52). 18 (25). 32 (40)⁻ 144 (101). 112 (91) 42 (65)⁻ 1 (18) 0 (5) 1 (16) 8 -82 (105) 122 (192) -246 (394) 50 **AM & PM Forecasted Turning Movement** 16 Landover Road Landover Road **Volumes:** Landover Road **No-build Condition** 65 (86)____ T___191 (341) ← 1988 (1624) 1609 (2351)——— 38 (85) **←** 2178 (2378) ← 2313 (1822) 1340 (1768) ----1310 (2038)----Volumes Represent Peak Hour 415 (667) 460 (711) 187 (123) 230 (485) by Intersection Signalized Study Intersection 704 95 383 (343)_ 167 (198) -457 (701)[—] 149 (152)-75 (48)-Unsignalized Study 12 Intersection 3 4 5 6 -647 (1379) -156 (196) -89 (553) 13 -1014 (408) -614 (412) -433 (361) 495 **11**) AM (PM) — Turning Movement Scale: 1" = 2000' Evarts St andover Road Landover Road 260 (635) 1065 (1781) 1019 (1188) L 337 (391) 437 (557) 2065 (1412) 123 (44) 1359 (2071) 693 (216) 2329 (2869) ← 2189 (2403) **←**2589 (1692) ____ 202 (37) 146 (311) 11 202 12 Columbia Park Rd Lottsford Rd 198 (327)_ 335 (702) -26 (134)[–] 651 (826)_ 404 (427)-(566)_ (187) (205)[–] 121 (147 (39 (Sheriff Rd 14 __278 (155) __1217 (2317) -267 (218) 325 (243) -65 (65) 124 (277) 1071 (1952) 54 (359)__ 22 23 24 **—** 69 (81) **←** 2187 (1139) 345 (268) 28 (202) 115 (187) Arena Dr Technology 158 (75)_ 46 (1645) M Largo Town Center

Figure 6-32: Landover No-build Condition AM and PM Weekday Turning Movement Volumes

Figure 6-32: Landover No-build Condition AM and PM Weekday Turning Movement Volumes (continued) _298 (74) 1074 (615) 184 (216) -2(2) 451(584) -2(1) .300 (255) 150 (359) - 88 (150) -1 (2) -466 (588) -1 (1) .25 (17) 349 (430) -25 (63) Glenarde Ardmore Road Parkway Evarts Street 184 (281) 101 (246) 1 (1) -148 (159) -54 (41) **←** 399 (202) 467 (234) 48 (34)

- 5 (11) -182 (197) -203 (281) Arena Drive 11 (12) 21 (57) 69 (120) 67 (197) 233 (405) 283 (366) 1 (7) 1 (1) 1 (1) 5 (14) 382 (319) 35 (27) 18 (14) 0 (0) 39 (30) 139 (253) 149 (223) - 282 (281) **←** 192 (380) 125 (88) 218 (237) 44 (28) 1 (5) 174 (92) 280 (399) 72 (133) 1 (6) Ardwick MRA Access Sheriff Road Road 393 (256)_ 0 (3)-160 (131)^{_} 52 (80)_ 463 (368) · 18 (54)[–] 9 (9)_ 447 (611) 5 (8)^{_} 69 (71). 254 (256) 7 (13)⁻ 30 (37). 199 (199) 166 (289)⁻ 50 **AM & PM Forecasted Turning Movement** 16 **Volumes:** Arena Drive Arena Drive **No-build Condition** 242 (198<u>)</u> 242 (298) **FUTURE** 622 (827) 118 (163) **←** 559 (739) 603 (1025) **←** 572 (989) Volumes Represent Peak Hour Landover **ANALYSIS ONLY** 177 (411) by Intersection Signalized Study Intersection 704 Unsignalized Study Intersection 3 456 AM (PM) Turning Movement Scale: 1" = 2000' **FUTURE FUTURE ANALYSIS ONLY ANALYSIS ONLY** Columbia Park Rd Lottsford Rd 22 23 24 M Largo Town Center

Figure 6-33: Landover No-build Condition Intersection LOS for AM and PM Peak Hours



No-build Condition Operations Analysis

Based on the Synchro™ and CLV-based Excel worksheet analysis, many of the signalized study area intersections operate at acceptable overall conditions during the morning and afternoon peak hours. However, the following intersections in the study area operate with overall unacceptable conditions:

- Landover Road and Kent Town Place/75th Avenue (Intersection #3) during the AM peak hour
- Landover Road and Brightseat Road (Intersection #9) during the PM peak hour
- Landover Road and the I-95/I-495 Southbound On-ramp (Intersection #10) during the PM peak hour
- Landover Road and the I-95/I-495 Northbound Off-ramp (Intersection #11) during the PM peak hour
- Landover Road and St. Joseph's Drive/ McCormick Drive (Intersection #12) during the PM peak hour
- Landover Road and Lottsford Road (Intersection #13) during the PM peak hour
- Martin Luther King Jr. Highway and Ardwick-Ardmore Road (Intersection #16) during the AM and PM peak hours

A total of 18 signalized intersections and 1 unsignalized intersection would experience an unacceptable conditions for one or more turning movements. Compared to the Existing Condition, the No-build Condition would have two more intersections failing during the AM peak hour and there would be three more intersections failing during the PM peak hour. The Landover TIA (Appendix D) contains a more detailed No-build Condition traffic operations analysis.

The overall intersection LOS grades for the No-build Condition are depicted in figure 6-33 for the AM and PM peak hours. Table 6-24 shows the results of the LOS capacity analysis and the intersection projected delay under the No-build Condition during the AM and PM peak hours.